

ABSTRACT

The present invention is a precious metal-based amorphous alloy having a Pt-Cu-P based structure including in atomic %: $50 \leq \text{Pt} \leq 75\%$, $5 \leq \text{Cu} \leq 35\%$, and $15 \leq \text{P} \leq 25\%$ and is a precious metal-based amorphous alloy having a Pt-Pd-Cu-P based structure including in atomic %: $5 \leq \text{Pt} \leq 70\%$, $5 \leq \text{Pd} \leq 50\%$, $5 \leq \text{Cu} \leq 50\%$, and $5 \leq \text{P} \leq 30\%$. Preferably, cooling rates for manufacturing the alloys having these compositions are 10^{-1} to 10^{20} C/sec. for the Pt-Cu-P based structure and 10^1 to 10^{20} C/sec. for the Pt-Pd-Cu-P based structure.